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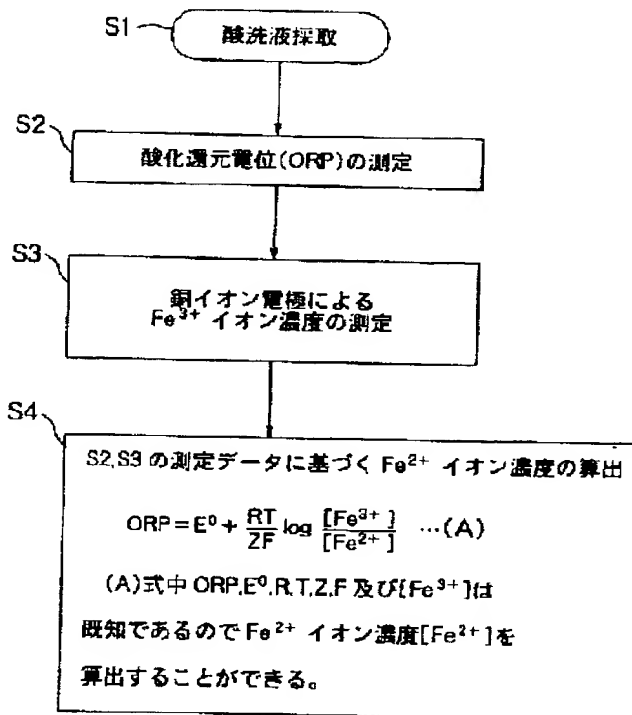
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TITLE : IRON ION CONCENTRATION
MEASURING METHOD FOR PICKLING
SOLUTION



ABSTRACT : PURPOSE: To continuously measure the iron ion concentration eliminating manual analysis from the concentration measurement in a method for measuring iron ion concentration in pickling solution in a process for pickling and descaling a hot rolled steel strip.

CONSTITUTION: At a step S1, the pickling solution of a pickling line is sampled, and at a step S2, oxidizing and reducing potentials are measured by oxidizing and reducing electrodes. At a step S3, Fe^{3+} ion concentration is measured by a copper ion electrode. The copper is electrode can measure with sensitivity of ten as large as that of copper ion for Fe^{3+} ions. At a step S4, the Fe^{2+} ion concentration can be calculated by using the measured values measured at the steps S2 and S3, and hence a titration analysis by a conventional manual analysis is not required, but continuous measurement can be performed in a short time.

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